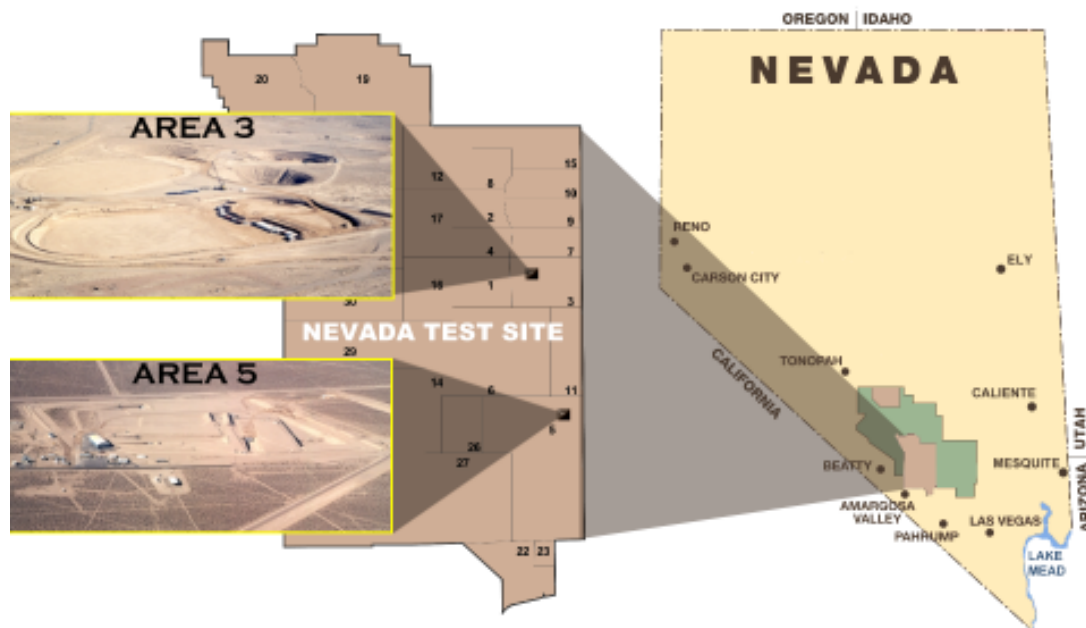


## Waste Management

### . . .at the Nevada Test Site

The Nevada Test Site plays a pivotal role in cleaning up nuclear weapons sites by providing essential waste management and disposal capabilities required to fulfill the U.S. Department of Energy's (DOE) Environmental Management mission. As one of the two designated national disposal facilities, the Nevada Test Site currently accepts low-level radioactive waste from approved U.S. Department of Energy (DOE) and defense industry sites across the United States.

In addition to low-level waste disposal at the Nevada Test Site's two state-of-the-art Radioactive Waste Management Sites (RWMSs) located in Area 3 and Area 5, the DOE Nevada Site Office also manages mixed low-level and transuranic waste at its Area 5 facility. The RWMSs offer clean, safe, and technologically advanced disposal cells that operate in accordance with federal, state, and local regulations.



### Low-Level Waste

Much of the radioactive waste managed at the Nevada Test Site is considered low-level waste. In fact, more than 27 million cubic feet of low-level waste has been disposed since 1980. Historically, these wastes resulted from nuclear weapons production and testing. More recently, low-level waste has been generated as part of cleanup activities at sites throughout the country and typically consists of debris, trash, soil, equipment, tools, and discarded personal protective clothing.

Low-level waste is generally defined not by what it *is*...but rather by what it is *not*. Radioactive waste is considered low-level if it cannot be classified as high-level, transuranic, spent nuclear fuel, or by-product materials such as uranium mill tailings. Shielding provided by low-level waste packaging and the relatively low total radioactivity of each low-level waste drum ensures that workers may handle this waste without any special equipment or clothing.

It is important to note that prior to waste acceptance, generators must undergo a rigorous certification and acceptance process.

### Mixed Low-Level Waste

Mixed low-level waste is a combination of low-level and hazardous waste. Hazardous waste is defined by the U.S. Environmental Protection Agency as waste that is harmful to human health or the environment and

# Waste Management

## . . . at the Nevada Test Site

includes substances such as ethyl alcohol, Freon, and various metals. Due to its hazardous component, which is governed by the *Resource Conservation and Recovery Act (RCRA)*, mixed low-level waste must be handled and disposed separately from low-level waste.

Currently, only DOE mixed low-level waste generated within the state of Nevada can be disposed at the Nevada Test Site. However, a RCRA Part B Permit Application has been submitted to the state of Nevada which, if approved, will allow for the disposal of mixed low-level waste from approved DOE sites throughout the United States.

### Hazardous Waste . . .

Non-radioactive hazardous waste which is generated by support activities, like vehicle or building maintenance, is also managed at the Nevada Test Site. This material is temporarily placed in a RCRA-permitted storage unit at the Area 5 RWMS until it is shipped off-site to a licensed commercial disposal facility.

## Transuranic Waste

Another type of waste managed at the Nevada Test Site is called transuranic waste. Waste is identified as transuranic if it contains material contaminated with elements that have an atomic number greater than uranium (92), hence the name “trans” or “beyond” uranium. Transuranic waste is further defined as waste that contains more than 100 nanocuries of alpha-emitting isotopes per gram, with half-lives greater than 20 years (transuranic waste is not spent nuclear fuel or high-level waste).



Most of the transuranic waste temporarily stored at the Area 5 RWMS contains hazardous components and is therefore considered mixed transuranic waste. All of the transuranic waste at the Nevada Test Site requires characterization and certification in order to be shipped to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico for permanent disposal.

## Transportation

Transportation of all waste to and from the Nevada Test Site is strictly monitored. Drivers complete routing reports for each low-level waste shipment that arrives at the Nevada Test Site. Information from these reports, such as the number of shipments and routes taken, is summarized quarterly and is available online at <http://www.nv.doe.gov>.

Information on DOE's National Transportation Program can be found at <http://www.ntp.doe.gov>.

To learn more about the integral role Waste Management plays in the overall Environmental Management mission and for additional details on the projects listed here, visit <http://www.nv.doe.gov>.

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